

L2 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2004:513550 CAPLUS  
 DOCUMENT NUMBER: 141:76694  
 TITLE: A composition containing triterpenoid saponins  
 extracted from bamboo, and the preparation method and  
 use thereof  
 INVENTOR(S): Zhang, Ying; Wu, Xiaoqin; Yu, Zhuoyu; Zhu, Yunlong;  
 Chen, Lingen; Luo, Shenggen  
 PATENT ASSIGNEE(S): Zhejiang University (Hangzhou) Leaf Bio-Technology  
 Co., Ltd., Peop. Rep. China; Shanghai Yunteng  
 Plant-Extract Science and Technology Development Co.,  
 Ltd.  
 SOURCE: PCT Int. Appl., 30 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Chinese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE       |
|--|------|----------|-----------------|------------|
| WO 2004052383  | A1   | 20040624 | WO 2003-CN309   | 20030428   |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CO,<br>CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM,<br>HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,<br>LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH,<br>PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,<br>UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |      |          |                 |            |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,<br>KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,<br>FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,<br>BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                 |            |
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| EP 1576958   | A1   | 20050921 | EP 2003-724792  | 20030428   |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,<br>IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK   |      |          |                 |            |
| JP 2006512330  | T    | 20060413 | JP 2004-557744  | 20030428   |
| US 2006148733  | A1   | 20060706 | US 2005-538463  | 20051123   |
| PRIORITY APPLN. INFO.:   |      |          | CN 2002-154401  | A 20021210 |
|  |      |          | WO 2003-CN309   | W 20030428 |

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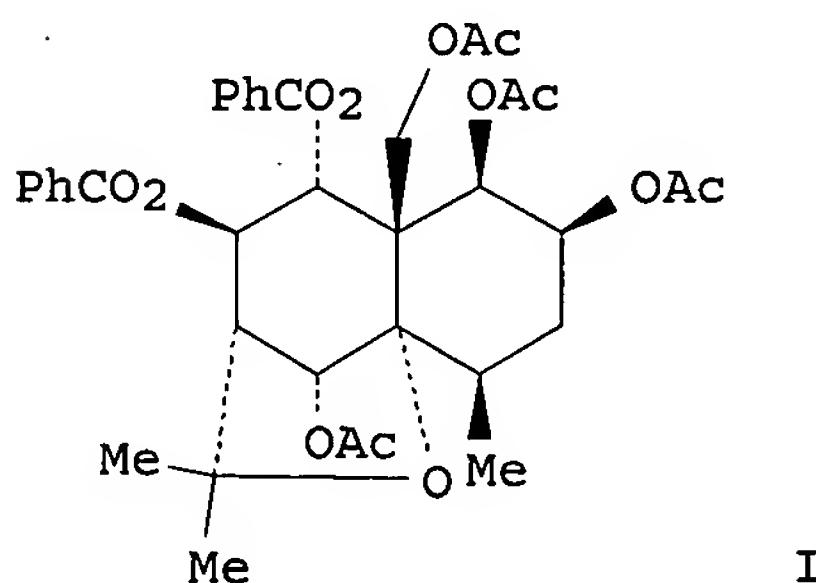
L2 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2002:878092 CAPLUS  
 DOCUMENT NUMBER: 139:81998  
 TITLE: Study on constituents of latex: triterpenoids of  
 Euphorbia tirucalli  
 AUTHOR(S): Fujita, Maki; Oka, Hanae; Arai, Yoko; Masuda, Kazuo;  
 Takano, Akihito; Shiojima, Kenji  
 CORPORATE SOURCE: Showa Pharmaceutical University, Machida, Tokyo,

SOURCE: 194-8543, Japan  
Natural Medicines (Tokyo, Japan) (2002), 56(4), 160  
CODEN: NMEDEO; ISSN: 1340-3443  
PUBLISHER: Japanese Society of Pharmacognosy  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The normal hexane extract of *Euphorbia tirucalli* was chromatographed on silica gel yielding several fractions. Paraffins from fraction 1 were mixts. of C<sub>23</sub>H<sub>48</sub> to C<sub>31</sub>H<sub>64</sub>, while fatty acid esters from fraction 2 were esters of compound euphol and tirucallol. Three acetates of euphol, tirucallol and lupeol and two ketones, lupenone and friedelin were detected in fraction 3. Triterpenoid alcs. I, II and glutinol were identified from the alc. fraction of fraction 4.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2000:477440 CAPLUS  
DOCUMENT NUMBER: 133:220150  
TITLE: A novel agarofuran sesquiterpene, celahin D from *Celastrus hindsii* Benth  
AUTHOR(S): Huang, Hui-Chi; Shen, Chien-Chang; Chen, Chieh-Fu; Wu, Yang-Chang; Kuo, Yao-Haur  
CORPORATE SOURCE: Graduate Institute of Natural Products, Kaohsiung Medical College, Kaohsiung, 807, Taiwan  
SOURCE: Chemical & Pharmaceutical Bulletin (2000), 48(7), 1079-1080  
CODEN: CPBTAL; ISSN: 0009-2363  
PUBLISHER: Pharmaceutical Society of Japan  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



AB A novel agarofuran sesquiterpene polyol ester, 1 $\beta$ ,2 $\beta$ ,6 $\alpha$ ,15 $\beta$ -tetraacetoxy-8 $\beta$ ,9 $\alpha$ -dibenzoyloxy- $\beta$ -dihydroagarofuran (celahin D, I), two known analogs of 1,1 $\beta$ -acetoxy-8 $\beta$ ,9 $\alpha$ -dibenzoyloxy-4 $\alpha$ ,6 $\alpha$ -dihydroxy-2 $\beta$ -( $\alpha$ -methylbutanoyloxy)- $\beta$ -dihydroagarofuran and 1 $\beta$ -acetoxy-8 $\beta$ ,9 $\alpha$ -dibenzoyloxy-6 $\alpha$ -hydroxy-2 $\beta$ -( $\alpha$ -methylbutanoyloxy)- $\beta$ -dihydroagarofuran, and a known cytotoxic sesquiterpene pyridine alkaloid, emarginatine E, were isolated from the stems of *Celastrus hindsii* Benth. Three known triterpenes, loranthol, lupenone and friedelinol were also obtained from the titled plant. Structural elucidation of I was established by 2D NMR spectra.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1995:453161 CAPLUS

DOCUMENT NUMBER: 122:235234  
TITLE: Isolation of constituents from the leaves of *Syzygium tripinnatum*  
AUTHOR(S): Tsai, Ian-Lih; Sheen, Wine-Show; Chen, Jih-Jung; Chen, Ih-Sheng  
CORPORATE SOURCE: School of Pharmacy, Kaohsiung Medical College, Kaohsiung, Taiwan  
SOURCE: Chinese Pharmaceutical Journal (Taipei, Taiwan) (1994), 46(5), 401-12  
CODEN: CPHJEP; ISSN: 1016-1015  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Six triterpenoids (friedelin, lupenone, lupeol, lupenyl palmitate, obtusalin and cycloartenyl stearate) and 3 steroids (stigmast-4-en-3-one,  $\beta$ -sitosterol and  $\beta$ -sitosteryl stearate) were isolated from the CHCl<sub>3</sub> soluble fraction of the leaves of *S. tripinnatum*. The structures of these compds. were verified by chemical and spectroscopic methods.

L2 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1975:552246 CAPLUS  
DOCUMENT NUMBER: 83:152246  
TITLE: Triterpenoids and the related compounds from gramineae plants. X  
AUTHOR(S): Ohmoto, Taichi; Uzawa, Sumiko; Tanaka, Ryuji  
CORPORATE SOURCE: Fac. Pharm., Toho Univ., Funabashi, Japan  
SOURCE: Shoyakugaku Zasshi (1974), 28(1), 1-6  
CODEN: SHZAAY; ISSN: 0037-4377  
DOCUMENT TYPE: Journal  
LANGUAGE: Japanese  
GI For diagram(s), see printed CA Issue.  
AB Fourteen triterpenoids and related compds. were isolated from Arundinarieae and identified to be  $\beta$ -amyrin (I) [559-70-6], fernenol [4966-00-1], fernenone [6090-29-5], arundoin [4555-56-0], cylindrin [17904-55-1], epifriedelinol [16844-71-6], friedelin [559-74-0], germanicol [465-02-1], miliacin [5945-45-9], glutinol [545-24-4], glutinone [508-09-8], lupeol [545-47-1], lupenone [1617-70-5] and taraxerol [127-22-0].

L2 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1975:455701 CAPLUS  
DOCUMENT NUMBER: 83:55701  
TITLE: Triterpenoids from ten *Lithocarpus* species of Hong Kong  
AUTHOR(S): Hui, Wai-Haan; Ko, Phyllis D. S.; Lee, Yuk-Chun; Li, Man-Moon; Arthur, Henry R.  
CORPORATE SOURCE: Dep. Chem., Univ. Hong Kong, Hong Kong, Hong Kong  
SOURCE: Phytochemistry (Elsevier) (1975), 14(4), 1063-6  
CODEN: PYTCAS; ISSN: 0031-9422  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB From the petrol exts. of the leaves and stems of 10 *Lithocarpus* species (*L. attenuata*, *L. cornea*, *L. elizabethae*, *L. glabra*, *L. haipinii*, *L. hancei*, *L. harlandi*, *L. irwinii*, *L. litchioides*, and *L. polystachya*) of the Fagaceae family, were isolated 23 different triterpenoids, and sitosterol and stigmasterol. Of the triterpenoids, 11 belonged to the oleanane and rearranged oleanane group [ $\beta$ -amyrin, friedelin, friedelan-3 $\beta$ -ol, glutinol, taraxerone, taraxerol, and its acetate, canophyllol (28-hydroxyfriedelan-3-one), friedelan-2,3-dione (3-hydroxyfriedel-3-en-2-one), pachysandiol A (2 $\alpha$ ,3 $\beta$ -dihydroxyfriedelane) and a new compound lithocarpic lactone C30H50O2]. Four compds. were from the lupane and rearranged lupane group (lupenone, lupeol, betulin, and taraxasterol), 2 from the hopane group (22-hydroxyhopan-3-one and 3 $\beta$ ,22-

dihydroxyhopane), and 6 were probably new compds.

L2 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1969:488461 CAPLUS  
DOCUMENT NUMBER: 71:88461  
TITLE: Triterpenoids and related compounds from gramineae  
plants. V  
AUTHOR(S): Ohmoto, Taichi  
CORPORATE SOURCE: Fac. Pharm., Toho Univ., Funabashi, Japan  
SOURCE: Yakugaku Zasshi (1969), 89(6), 814-20  
CODEN: YKKZAJ; ISSN: 0031-6903  
DOCUMENT TYPE: Journal  
LANGUAGE: Japanese

AB Triterpenoids in *Paspalum dilatatum*, *Hemarthrica sibirica*, *Miscanthus sacchariflorus*, *M. sinensis*, *Saccharum spontaneum* var *arenicola*, *Coix lacryma-jobi*, and *Zea mays* were examined from a chemotaxonomic point of view. Lupeol Me ether, m. 250-1°,  $[\alpha]D_{23}$  35.6° (CHCl<sub>3</sub>) was isolated from culms and leaves of *P. dilatatum* and identified with a specimen prepared by methylation of lupeol. Other constituents were  $\beta$ -amyrin, its Me ether,  $\alpha$ -amyrin Me ether, campesterol, crusgallin, cylindrin, ferneol, friedelin, glutinol, glutinone, isoarborinol, lupeol, miliacin,  $\beta$ -sitosterol, stigmasterol, and taraxerol. Triterpenoids of *Zoysia matrella* were reinvestigated and fernenone, m. 206-7°,  $[\alpha]D_{23}$  -39.4°, and 12-ketoarundoin, m. 291°,  $[\alpha]D_{23}$  -5.2°, were identified for the first time from natural sources. Arundoin and lupenone were obtained from *Cynodon dactylon* and *Phyllostachys heterocycla* var *pubescens*, resp.

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 SOURCE: PCT Int. Appl., 30 pp.  
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| WO 2004052383  | A1   | 20040624 | WO 2003-CN309   | 20030428   |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CO,<br>CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM,<br>HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,<br>LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH,<br>PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ,<br>UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |      |          |                 |            |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,<br>KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,<br>FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,<br>BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                 |            |
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| PRIORITY APPLN. INFO.:   |      |          | CN 2002-154401  | A 20021210 |
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extracted from Bamboo, and the preparation method and use thereof. The triterpenoid saponins are extracted from various parts of bamboo belonging to Gramineae, such as Bamboo Shavings and the like, using supercrit. CO<sub>2</sub> fluid extraction technol. The content of triterpenoid saponins in the composition is 10-90%. The contents of friedelin and lupenone are 5-35% and 1-10% resp. The extract has good anti-free radical, anti-oxidation, antitumor, hypotensive activities and the like. The extract of the present invention can be useful as therapeutic drugs or functional foods for the treatment or prevention of cardiovascular and cerebral vascular diseases, as well as for the treatment of tumor, and useful in cosmetic field.

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| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,<br>KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,<br>FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,<br>BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                 |            |
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| US 2006148733  | A1   | 20060706 | US 2005-538463  | 20051123   |
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L11 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1970:705 CAPLUS  
 DOCUMENT NUMBER: 72:705  
 TITLE: New Zealand phytochemical survey. VII. Constituents  
 of some dicotyledons  
 AUTHOR(S): Cambie, Richard C.; Parnell, J. C.  
 CORPORATE SOURCE: Univ. Auckland, Auckland, N. Z.  
 SOURCE: New Zealand Journal of Science (1969), 12(3), 453-66

DOCUMENT TYPE:

Journal

LANGUAGE:

English

AB The leaves of *Olearia paniculata* were found to contain the triterpenes, friedelin, lupenone, and lupenyl acetate, and a small amount of a triterpene diol, tentatively identified as sophoradiol. Friedelin was also isolated from the roots of *O. paniculata*, while epifriedelinol, lupeol, lupenyl acetate and  $\beta$ -sitosterol were provisionally identified in the exts. by thin-layer chromatog. (TLC). The wood of *Corokia buddleoides* was found to contain taraxerol and  $\beta$ -sitosterol. Two further triterpenes isolated were identified as lupeol and lupenyl acetate. Lupeol was also the major triterpene isolated from the aerial portions of *Gaultheria paniculata* while  $\beta$ -sitosterol was also isolated from the extract. Friedelin,  $\beta$ -sitosterol, and ellagic acid were isolated from the wood of *Elaeocarpus hookerianus*. An extract of the wood of *Planchonella novo-zelandica* contained lupeol,  $\alpha$ -a myrin,  $\alpha$ -amyrinyl acetate,  $\alpha$ -spinasterol, stigmasterol, and campesterol. The wood of *Homalanthus polyandrus* contained a small amount of an unidentified triterpene ketone, C<sub>30</sub>H<sub>48</sub>O, isomeric with and similar to taraxerone and lupenone, but differing in its behavior on TLC.  $\beta$ -Sitosterol was also isolated from the extract. The leaves of *Alseuosmia macrophylla* contained lupeol, lupenyl acetate, and stigmasterol as principal constituents of a mixture of aliphatic acids and stearic acid. They also contained at least 3 triterpene acetates which have not been characterized.  $\beta$ -Sitosterol and traces of unidentified triterpenes were isolated from an ether extract of the wood of *Nothofagus solandri*. Large amts. of D-mannitol were obtained from the wood of *Myoporum laetum*. Alkaloids were present in the leaves and  $\beta$ -sitosterol was identified in the wood and bark. D-Mannitol was the major compound isolated from the wood of *Hebe salicifolia*.  $\beta$ -Sitosterol was the only compound readily identified in exts. of wood of *Aciphylla colensoi*, the aerial parts of *Clematis hookeriana*, and the wood of *Senecio elaeagnifolius*.  $\beta$ -Sitosterol and leucoanthocyanidin were the only extractives identified in the wood of *Knightia excelsa*. Stigmasterol and  $\beta$ -sitosterol were the principal sterols found in the bark and wood of *Pseudopanax crassifolium*. Mixts. of stigmasterol and  $\beta$ -sitosterol were also found in the leaves and wood of the related species *Neopanax laetum* and the woods of *N. arbor eum*, *N. colensoi*, *N. simplex*, and *N. simplex* var *sinclairii*. The principal constituent of a mixture of aliphatic alcs. in the leaves of *N. laetum* was identified as triacontan-1-ol. The barks of *Pittosporum colensoi* and *P. eugenioides* also contained stigmasterol and  $\beta$ -sitosterol.

L11 ANSWER 3 OF 4

MEDLINE on STN

ACCESSION NUMBER: 2001068765 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 10923844  
 TITLE: A novel agarofuran sesquiterpene, celahin D from *Celastrus hindsii* Benth.  
 AUTHOR: Huang H C; Shen C C; Chen C F; Wu Y C; Ku Y H  
 CORPORATE SOURCE: Graduate Institute of Natural Products, Kaohsiung Medical College, Taiwan, ROC.  
 SOURCE: Chemical & pharmaceutical bulletin, (2000 Jul) Vol. 48, No. 7, pp. 1079-80.  
 Journal code: 0377775. ISSN: 0009-2363.  
 PUB. COUNTRY: Japan  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 200101  
 ENTRY DATE: Entered STN: 22 Mar 2001  
 Last Updated on STN: 22 Mar 2001  
 Entered Medline: 4 Jan 2001  
 AB A novel agarofuran sesquiterpene polyol ester, 1 $\beta$ ,2 $\beta$ ,6 $\alpha$ ,15 $\beta$ -tetracetoxy-8 $\beta$ ,9 $\alpha$ -dibenzoyloxy- $\beta$ -dihydroagarofuran (celahin D)

(1), two known analogues of 1,1beta-acetoxy-8beta,9alpha-dibenzoyloxy-4alpha6alpha-dihydroxy-2beta(alphamethylbutanoyloxy)-beta-++  
+dihydroagarofuran (2) and beta-acetoxy-8beta,9alpha-dibenzoyloxy-6alpha-  
hy droxy-2beta(alpha -methylbutanoyloxy)-beta-dihydroagarofuran (3), and a  
known cytotoxic sesquiterpene pyridine alkaloid, emarginatine E (4) were  
isolated from the stems of *Celastrus hindsii* Benth. Three known  
triterpenes, loranthol (5), lupenone (6) and friedelinol  
(7) were also obtained from the titled plant. Structural elucidation of  
compound 1 was established by 2D NMR spectra.

L11 ANSWER 4 OF 4 MEDLINE on STN  
ACCESSION NUMBER: 2000113513 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 10647216  
TITLE: Pentacyclic triterpenes from *Chuquiraga ulicina*.  
AUTHOR: Flagg M L; Valcic S; Montenegro G; Gomez M; Timmermann B N  
CORPORATE SOURCE: Department of Pharmaceutical Sciences, College of Pharmacy,  
University of Arizona, Tucson 85721, USA.  
CONTRACT NUMBER: ES06694 (NIEHS)  
T37TW00036 (FIC)  
U01 TW00316-06 (FIC)  
SOURCE: *Phytochemistry*, (1999 Dec) Vol. 52, No. 7, pp. 1345-50.  
Journal code: 0151434. ISSN: 0031-9422.  
PUB. COUNTRY: United States  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200002  
ENTRY DATE: Entered STN: 9 Mar 2000  
Last Updated on STN: 9 Mar 2000  
Entered Medline: 23 Feb 2000  
AB Four taraxastane triterpenes, 3 beta-acetoxy-6 beta-hydroxytaraxasta-20-ene, 6 beta-hydroxytaraxasta-20-en-3-one, 6 beta-hydroxytaraxasta-20-ene 3 beta-palmitate and 3 beta,6 beta-dihydroxytaraxasta-20-ene were isolated from the dichloromethane-methanol extract of *Chuquiraga ulicina* ssp. *ulicina* together with the known triterpenes lupeol, lupenyl acetate, lupenone, friedelinol, 3 beta-acetoxy-30-nor-lupan-20-one, and 30-nor-lupan-3 beta-ol-20-one.

L26 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1975:552246 CAPLUS

DOCUMENT NUMBER: 83:152246

TITLE: Triterpenoids and the related compounds from  
gramineae plants. X

AUTHOR(S): Ohmoto, Taichi; Uzawa, Sumiko; Tanaka, Ryuji

CORPORATE SOURCE: Fac. Pharm., Toho Univ., Funabashi, Japan

SOURCE: Shoyakugaku Zasshi (1974), 28(1), 1-6

CODEN: SHZAAY; ISSN: 0037-4377

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

GI For diagram(s), see printed CA Issue.

AB Fourteen triterpenoids and related compds. were isolated from Arundinariae and identified to be  $\beta$ -amyrin (I) [559-70-6], fernenol [4966-00-1], fernenone [6090-29-5], arundoin [4555-56-0], cylindrin [17904-55-1], epifriedelinol [16844-71-6], friedelin [559-74-0], germanicol [465-02-1], miliacin [5945-45-9], glutinol [545-24-4], glutinone [508-09-8], lupeol [545-47-1], lupenone [1617-70-5] and taraxerol [127-22-0].

L26 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1969:488461 CAPLUS

DOCUMENT NUMBER: 71:88461

TITLE: Triterpenoids and related compounds from  
gramineae plants. V

AUTHOR(S): Ohmoto, Taichi

CORPORATE SOURCE: Fac. Pharm., Toho Univ., Funabashi, Japan

SOURCE: Yakugaku Zasshi (1969), 89(6), 814-20

CODEN: YKKZAJ; ISSN: 0031-6903

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

AB Triterpenoids in Paspalum dilatatum, Hemarthrica sibirica, Miscanthus sacchariflorus, M. sinensis, Saccharum spontaneum var arenicola, Coix lacryma-jobi, and Zea mays were examined from a chemotaxonomic point of view. Lupeol Me ether, m. 250-1°,  $[\alpha]D23$  35.6° (CHCl<sub>3</sub>) was isolated from culms and leaves of P. dilatatum and identified with a specimen prepared by methylation of lupeol. Other constituents were  $\beta$ -amyrin, its Me ether,  $\alpha$ -amyrin Me ether, campesterol, crusgallin, cylindrin, ferneol, friedelin, glutinol, glutinone, isoarborinol, lupeol, miliacin,  $\beta$ -sitosterol, stigmasterol, and taraxerol. Triterpenoids of Zoysia matrella were reinvestigated and fernenone, m. 206-7°,  $[\alpha]D23$  -39.4°, and 12-ketoarundoin, m. 291°,  $[\alpha]D23$  -5.2°, were identified for the first time from natural sources. Arundoin and lupenone were obtained from Cynodon dactylon and Phyllostachys heterocyclova var pubescens, resp.

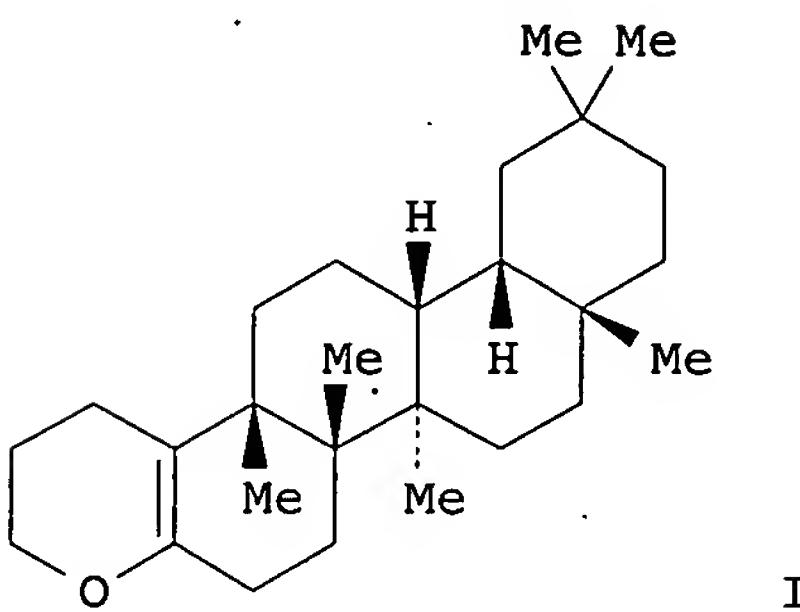
L26 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1975:552246 CAPLUS  
DOCUMENT NUMBER: 83:152246  
TITLE: Triterpenoids and the related compounds from  
gramineae plants. X  
AUTHOR(S): Ohmoto, Taichi; Uzawa, Sumiko; Tanaka, Ryuji  
CORPORATE SOURCE: Fac. Pharm., Toho Univ., Funabashi, Japan  
SOURCE: Shoyakugaku Zasshi (1974), 28(1), 1-6  
CODEN: SHZAAY; ISSN: 0037-4377  
DOCUMENT TYPE: Journal  
LANGUAGE: Japanese  
GI For diagram(s), see printed CA Issue.  
AB Fourteen triterpenoids and related compds. were isolated from  
Arundinarieae and identified to be  $\beta$ -amyrin (I) [559-70-6], fernenol  
[4966-00-1], fernenone [6090-29-5], arundoin [4555-56-0], cylindrin  
[17904-55-1], epifriedelinol [16844-71-6], friedelin  
[559-74-0], germanicol [465-02-1], miliacin [5945-45-9], glutinol  
[545-24-4], glutinone [508-09-8], lupeol [545-47-1], lupenone  
[1617-70-5] and taraxerol [127-22-0].

L26 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1969:488461 CAPLUS  
DOCUMENT NUMBER: 71:88461  
TITLE: Triterpenoids and related compounds from  
gramineae plants. V  
AUTHOR(S): Ohmoto, Taichi  
CORPORATE SOURCE: Fac. Pharm., Toho Univ., Funabashi, Japan  
SOURCE: Yakugaku Zasshi (1969), 89(6), 814-20  
CODEN: YKKZAJ; ISSN: 0031-6903  
DOCUMENT TYPE: Journal  
LANGUAGE: Japanese  
AB Triterpenoids in Paspalum dilatatum, Hemarthrica sibirica, Miscanthus  
sacchariflorus, M. sinensis, Saccharum spontaneum var arenicola, Coix  
lacryma-jobi, and Zea mays were examined from a chemotaxonomic point of  
view. Lupeol Me ether, m. 250-1°,  $[\alpha]D_{23}$  35.6°  
(CHCl<sub>3</sub>) was isolated from culms and leaves of P. dilatatum and identified  
with a specimen prepared by methylation of lupeol. Other constituents were  
 $\beta$ -amyrin, its Me ether,  $\alpha$ -amyrin Me ether, campesterol,  
crusgallin, cylindrin, ferneol, friedelin, glutinol, glutinone,  
isoarborinol, lupeol, miliacin,  $\beta$ -sitosterol, stigmasterol, and  
taraxerol. Triterpenoids of Zoysia matrella were reinvestigated and  
ferneneone, m. 206-7°,  $[\alpha]D_{23}$  -39.4°, and  
12-ketoarundoin, m. 291°,  $[\alpha]D_{23}$  -5.2°, were  
identified for the first time from natural sources. Arundoin and  
lupenone were obtained from Cynodon dactylon and Phyllostachys  
heterocycla var pubescens, resp.

L27 ANSWER 12 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1997:450410 CAPLUS  
 DOCUMENT NUMBER: 127:188193  
 TITLE: Gracilipene: a heterocyclic seco-trisnor-oleanane from  
 Calophyllum gracilipes (Guttiferae)  
 AUTHOR(S): Cao, Shu-Geng; Sim, Keng-Yeow; Goh, Swee-Hock; Xue,  
 Feng; Mak, Thomas C. W.  
 CORPORATE SOURCE: Department Chemistry, National University Singapore,  
 119260, Singapore  
 SOURCE: Tetrahedron Letters (1997), 38(27), 4783-4786  
 CODEN: TELEAY; ISSN: 0040-4039  
 PUBLISHER: Elsevier  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



AB Gracilipene (I), a novel heterocyclic trisnor-triterpene from the leaves of *Calophyllum gracilipes*, shows an unprecedented rearranged seco-trisnor-oleanane structure with a dihydropyran ring-A, as determined by NMR spectra and single crystal X-ray anal. Other known triterpenes isolated include friedelin, lupeol, lupenone,  $\beta$ -sitosterol, stigmasterol, 3 $\beta$ -hydroxy-30-norlupan-20-one, lupane-3 $\beta$ ,20-diol, (20R)-3 $\beta$ -hydroxylupan-29-oic acid, betulinic acid and squalene.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 13 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1995:453161 CAPLUS  
 DOCUMENT NUMBER: 122:235234  
 TITLE: Isolation of constituents from the leaves of *Syzygium tripinnatum*  
 AUTHOR(S): Tsai, Ian-Lih; Sheen, Wine-Show; Chen, Jih-Jung; Chen, Ih-Sheng  
 CORPORATE SOURCE: School of Pharmacy, Kaohsiung Medical College,  
 Kaohsiung, Taiwan  
 SOURCE: Chinese Pharmaceutical Journal (Taipei, Taiwan)  
 (1994), 46(5), 401-12  
 CODEN: CPHJEP; ISSN: 1016-1015  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Six triterpenoids (friedelin, lupenone, lupeol, lupenyl palmitate, obtusalin and cycloartenyl stearate) and 3 steroids (stigmast-4-en-3-one,  $\beta$ -sitosterol and  $\beta$ -sitosteryl stearate) were isolated from the CHCl<sub>3</sub> soluble fraction of the leaves of *S. tripinnatum*. The structures of these compds. were verified by chemical and spectroscopic methods.

L27 ANSWER 14 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1995:184598 CAPLUS  
DOCUMENT NUMBER: 122:76535  
TITLE: Foliar lipids. III. Triterpenic ketones.  
AUTHOR(S): Debal, A.; Mallet, J.-F.; Ucciani, E.; Doumenq, P.;  
Gamisans, J.  
CORPORATE SOURCE: Faculte des Sciences et Techniques, Marseille, 13397,  
Fr.  
SOURCE: Revue Francaise des Corps Gras (1994), 41(5-6), 113-18  
CODEN: RFCGAE; ISSN: 0035-3000  
DOCUMENT TYPE: Journal  
LANGUAGE: French  
AB Hexane exts. of plant leaves (HEPL) of 16 species have been investigated  
for their triterpenic ketone content. Five pentacyclic ketones have been  
identified by GC/IR-FT and GC-MS, i.e. arborinone, taraxerone,  
lupenone, friedelin and  $\beta$ -amyrone. A sixth one  
could not be identified. Two species represented interesting sources:  
*Ruscus aculeatus* (12.5% lupenone/HEPL) and *Senecio bicolor* (8.1  
%  $\beta$ -amyrone/HEPL).

L27 ANSWER 15 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1994:442514 CAPLUS  
DOCUMENT NUMBER: 121:42514  
TITLE: Chemical components of *Daguoyouamateng* (*Mucuna macrocarpa*)  
AUTHOR(S): Hu, Wangyun; Luo, Shide; Cai, Jianxun  
CORPORATE SOURCE: Kunming Inst. Bot., Chin. Acad. Sci., Kunming, 650223,  
Peop. Rep. China  
SOURCE: *Zhongcaoyao* (1994), 25(2), 59-60,63  
CODEN: CTYAD8; ISSN: 0253-2670  
DOCUMENT TYPE: Journal  
LANGUAGE: Chinese  
AB Lupenone, friedelin,  $\Delta$ 5,22-stigmastadien-3 $\beta$ -ol, 2,3-dihydroxypropyl tetracosanoate, 2,3-dihydroxypropyl pentacosanoate, and 2,3-dihydroxypropyl hexacosanoate were isolated from *Daguoyouamateng* (*Mucuna macrocarpa* stem) and identified by chemical and spectrochem. methods. 2,3-Dihydroxypropyl pentacosanoate was a novel comod.

L27 ANSWER 16 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1994:240087 CAPLUS  
DOCUMENT NUMBER: 120:240087  
TITLE: Constituents of *Clusia fluminensis*  
AUTHOR(S): Nagem, Tanus J.; Mesquita, Antonio A. L.; Silva,  
Rosalice  
CORPORATE SOURCE: Dep. Chem., Univ. Minas Gerais, Belo Horizonte, 30161,  
Brazil  
SOURCE: *Fitoterapia* (1993), 64, 380  
CODEN: FTRPAE; ISSN: 0367-326X  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The leaves of *Clusia fluminensis* yielded tricosane, lupenone,  
friedelin,  $\alpha$ - and  $\beta$ - friedelinol, amyrin,  
octacosanol, and  $\beta$ -sitosterol.

L27 ANSWER 17 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1990:155281 CAPLUS  
DOCUMENT NUMBER: 112:155281  
TITLE: The constituents from petroleum ether fraction of the  
stem bark of *Premna fulva* Craib  
AUTHOR(S): Zeng, Quan; Liu, Chengji; Liu, Ligen  
CORPORATE SOURCE: Dep. Tradit. Chin. Med., China Pharm. Univ., Nanjing,  
Peop. Rep. China  
SOURCE: *Zhongguo Yaoke Daxue Xuebao* (1989), 20(2), 94-6

CODEN: ZHYXE9; ISSN: 1000-5048

DOCUMENT TYPE:

Journal

LANGUAGE:

Chinese

AB The following compds. were isolated in crystal form from the petroleum ether fraction from *P. fulva* stem bark: friedelin, friedelan-3 $\beta$ -ol,  $\beta$ -sitosterol, and lupen-3-one. The compds. were identified by chemical and spectroscopic anal. Lupene-3-one was isolated and identified from the *Premna* genus (Verbenaceae) for the first time.

L27 ANSWER 18 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1980:181424 CAPLUS

DOCUMENT NUMBER: 92:181424

TITLE: Photochemical or photomimetic fossil triterpenoids in sediments and petroleum

AUTHOR(S): Corbet, B.; Albrecht, P.; Ourisson, G.

CORPORATE SOURCE: Inst. Chim., Univ. Louis Pasteur, Strasbourg, 67 008, Fr.

SOURCE: Journal of the American Chemical Society (1980), 102(3), 1171-3

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Eighteen fossil triterpeneoids, including friedelin,  $\alpha$ - and  $\beta$ -amyrone, lupenone, lupanone and related ring-opened derivs., were isolated from the sediments in the delta of the Mahakam river (Indonesia) and some photochem. mechanisms were postulated for their formation.

L27 ANSWER 19 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1978:117763 CAPLUS

DOCUMENT NUMBER: 88:117763

TITLE: An examination of the Euphorbiace of Hong Kong. Part 16. Triterpenoids from *Glochidion macrophyllum* and *G. puberum*

AUTHOR(S): Hui, Wai-Haan; Li, Man-Moon

CORPORATE SOURCE: Dep. Chem., Univ. Hong Kong, Hong Kong, Hong Kong

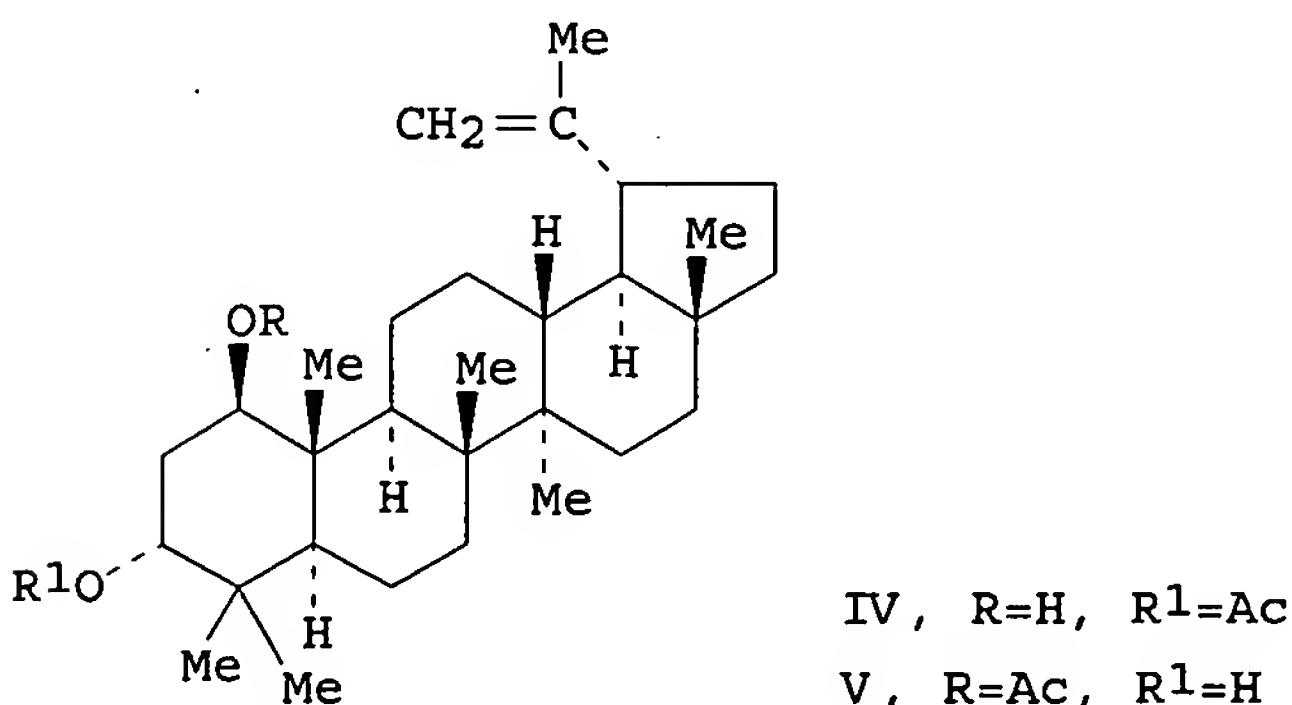
SOURCE: Phytochemistry (Elsevier) (1978), 17(1), 156-7

CODEN: PYTCAS; ISSN: 0031-9422

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB *G. macrophyllum* yielded Me betulinate and glochidicin. *G. puberum* leaves yielded friedelin (I), friedelan-3 $\beta$ -ol (II), lupeol, lup-20(29)-ene-1,3-dione, and sitosterol (III), and the stems I, II, III, lupenone, glochidone, lup-20(29)-en-1 $\beta$ -ol-3 $\alpha$ -yl acetate (IV), lup-20(29)-en-3 $\alpha$ -ol-1 $\beta$ -yl acetate (V), glochidinol,

glochidiol, and lup-20(29)-ene-1 $\beta$ ,3 $\beta$ -diol.

L27 ANSWER 20 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1977:117668 CAPLUS  
DOCUMENT NUMBER: 86:117668  
TITLE: Chemical constituents of the flowers and leaves of  
N. grandiflora  
AUTHOR(S): Kotaiah, Y.; Lakshmi, N. K. M.; Rao, E. Venkata; Rao,  
D. Venkata  
CORPORATE SOURCE: Dep. Pharm. Sci., Andhra Univ., Waltair, India  
SOURCE: Indian Journal of Pharmacy (1976), 38(5), 130-1  
CODEN: IJPAAO; ISSN: 0019-5472  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Two flavonoids were isolated from the flowers of *N. grandiflora* and  
identified as kaempferitrin and kaempferol 7-O-rhamnoside.  
Friedelin and lupenone were isolated from the leaves.

L27 ANSWER 21 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1975:544551 CAPLUS  
DOCUMENT NUMBER: 83:144551  
TITLE: Indian medicinal plants. XXXIV. Triterpenes from  
*Grewia asiatica*  
AUTHOR(S): Chattopadhyay, Subhagata; Pakrashi, S. C.  
CORPORATE SOURCE: Dep. Med. Chem., Indian Inst. Exp. Med., Calcutta,  
India  
SOURCE: Journal of the Indian Chemical Society (1975), 52(6),  
553  
CODEN: JICSAH; ISSN: 0019-4522  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The stem-bark of *G. asiatica* was successively extracted in a Soxhlet apparatus  
with  
petroleum ether, C<sub>6</sub>H<sub>6</sub>, and CH<sub>2</sub>Cl<sub>2</sub>. From the petroleum ether extract was  
isolated lupeol and betulin. From the petroleum ether and C<sub>6</sub>H<sub>6</sub> extract was  
isolated lupenone and friedelin. The compds. were  
identified by phys. and chemical properties.

L27 ANSWER 22 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1975:455701 CAPLUS  
DOCUMENT NUMBER: 83:55701  
TITLE: Triterpenoids from ten *Lithocarpus* species of Hong  
Kong  
AUTHOR(S): Hui, Wai-Haan; Ko, Phyllis D. S.; Lee, Yuk-Chun; Li,  
Man-Moon; Arthur, Henry R.  
CORPORATE SOURCE: Dep. Chem., Univ. Hong Kong, Hong Kong, Hong Kong  
SOURCE: Phytochemistry (Elsevier) (1975), 14(4), 1063-6  
CODEN: PYTCAS; ISSN: 0031-9422  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB From the petrol exts. of the leaves and stems of 10 *Lithocarpus* species  
(*L. attenuata*, *L. cornea*, *L. elizabethae*, *L. glabra*, *L. haipinii*, *L.*  
*hancei*, *L. harlandi*, *L. irwinii*, *L. litchioides*, and *L. polystachya*) of  
the Fagaceae family, were isolated 23 different triterpenoids, and  
sitosterol and stigmasterol. Of the triterpenoids, 11 belonged to the  
oleanane and rearranged oleanane group [ $\beta$ -amyrin, friedelin  
, friedelan-3 $\beta$ -ol, glutinol, taraxerone, taraxerol, and its acetate,  
canophylol (28-hydroxyfriedelan-3-one), friedelan-2,3-dione  
(3-hydroxyfriedel-3-en-2-one), pachysandiol A (2 $\alpha$ ,3 $\beta$ -  
dihydroxyfriedelane) and a new compound lithocarpic lactone C<sub>30</sub>H<sub>50</sub>O<sub>2</sub>]. Four  
compds. were from the lupane and rearranged lupane group (lupenone  
, lupeol, betulin, and taraxasterol), 2 from the hopane group  
(22-hydroxyhopan-3-one and 3 $\beta$ ,22-dihydroxyhopane), and 6 were  
probably new compds.

L27 ANSWER 23 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1975:175161 CAPLUS  
DOCUMENT NUMBER: 82:175161  
TITLE: Chemical components of *Avicennia officinalis*  
AUTHOR(S): Subramanian, S. Sankara; Vedantham, T. N. C.  
CORPORATE SOURCE: Dep. Chem., Jawaharlal Inst. Postgrad. Med. Educ.  
Res., Pondicherry, India  
SOURCE: Indian Journal of Pharmacy (1974), 36(4), 105-6  
CODEN: IJPAAO; ISSN: 0019-5472  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The aerial parts of *A. officinalis* were extracted with CHCl<sub>3</sub> followed by 80% ETOH. Chromatog. of the extract on neutral alumina and elution with light petroleum yielded lupenone [1617-70-5], m. 165-6°, identified by comparison with an authentic sample. Light petroleum-benzene (9:1) fractions gave friedelin [559-74-0], m. 257-9°. Further elution with 1:1 light petroleum-benzene yielded lupeol [545-47-1], m. 208-10° and β-sitosterol [83-46-5], m. 132-3°. Elution with 98:2 CHCl<sub>3</sub>-MeOH gave betulinic acid [472-15-1], m. > 280°, identified as the Me ester m. 220-1°, acetate m. > 280°, and Me ester acetate m. 198-200°; and ursolic acid [77-52-1], m. > 280°, identified by preparation of its Me ester and Me ester acetate.

L27 ANSWER 24 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1973:1995 CAPLUS  
DOCUMENT NUMBER: 78:1995  
TITLE: Constituents of pollen. 1. Constituents of *Quercus acutissima*. 1  
AUTHOR(S): Ohmoto, Taichi; Nikaido, Tamotsu; Ikuse, Masa  
CORPORATE SOURCE: Fac. Pharm., Toho Univ., Funabashi, Japan  
SOURCE: Shoyakugaku Zasshi (1972), 26(1), 36-40  
CODEN: SHZAAY; ISSN: 0037-4377  
DOCUMENT TYPE: Journal  
LANGUAGE: Japanese  
AB Pollen of *Q. acutissima* was crushed ultrasonically and its constituents were studied. Stearic, palmitic, and oleic acids; friedelin; β-amyrone; lupenone; β-sitosterol; campesterol; glycerin; and araban were identified. Eighteen amino acids and citric, malonic, and malic acids were determined

L27 ANSWER 25 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1972:458778 CAPLUS  
DOCUMENT NUMBER: 77:58778  
TITLE: Chemistry of Brazilian Guttiferae. XXVIII. Xanthones from *Caraipa densiflora*  
AUTHOR(S): Alves De Lima, R.; Gottlieb, O. R.; Mesquita, A. A.  
Lins  
CORPORATE SOURCE: Esc. Pos-Graduacao, Univ. Fed. Rural Rio de Janeiro, Rio de Janeiro, Brazil  
SOURCE: Phytochemistry (Elsevier) (1972), 11(7), 2307-9  
CODEN: PYTCAS; ISSN: 0031-9422  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The trunk wood of *C. grandifolia* contains sitosterol, lupeol, lupenone, betulinic acid, and vanillin. The trunk wood of *C. densiflora* contains sitosterol, lupeol, friedelin, betulinic acid, vanillin, 1,6-dihydroxy-7,8-methylene-dioxyxanthone, and 1,5-dihydroxy-6,7-dimethoxyxanthone.

L27 ANSWER 26 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1969:481570 CAPLUS  
DOCUMENT NUMBER: 71:81570

TITLE: Examination of the Euphorbiaceae of Hong Kong. VI.  
AUTHOR (S): Isolation and structure of glochidionol, a new triterpene ketol from *Glochidion wrightii*  
CORPORATE SOURCE: Hui, Wai Haan; Fung, M. L.  
SOURCE: Univ. Hong Kong, Hong Kong  
Journal of the Chemical Society [Section] C: Organic (1969), (13), 1710-12  
CODEN: JSOOAX; ISSN: 0022-4952

DOCUMENT TYPE: Journal  
LANGUAGE: English

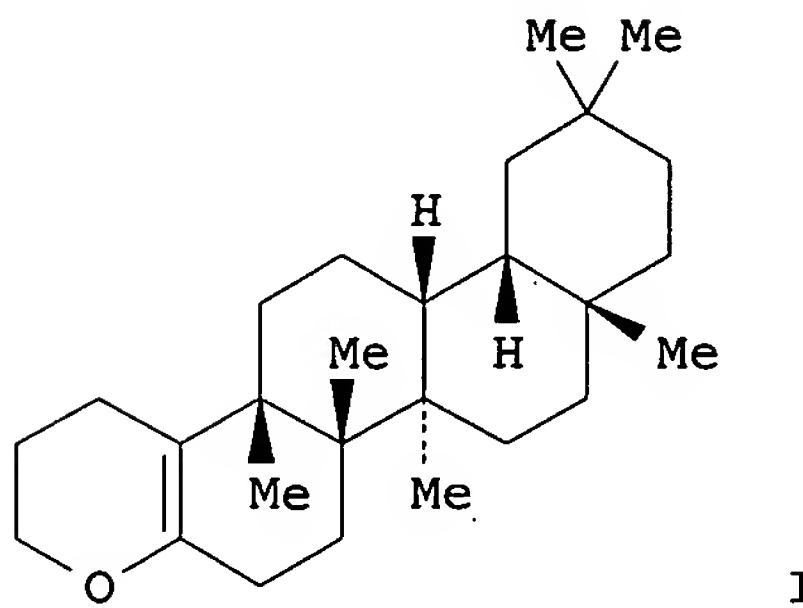
GI For diagram(s), see printed CA Issue.  
AB Glochidionol, isolated from the stems of *G. wrightii* was shown to be 1 $\beta$ -hydroxylup-20(29)-en-3-one (I) by chemical and N.M.R. spectroscopic evidence. The mass spectrum of glochidonyl acetate is discussed. Other compds. obtained from both the leaves and stems of the same plant are friedelin, glochidone, friedelan-3 $\beta$ -ol,  $\beta$ -sitosterol, and glochidiol. Lupenone and lupeol are also found in the stems.

L27 ANSWER 27 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1968:47008 CAPLUS  
DOCUMENT NUMBER: 68:47008  
TITLE: Triterpenes from some New Zealand dicotyledons  
AUTHOR (S): Briggs, Lindsay H.; Cambie, Richard C.; Couch, R. A. F.  
CORPORATE SOURCE: Univ. Auckland, Auckland, N. Z.  
SOURCE: New Zealand Journal of Science (1967), 10(4), 1076-82  
CODEN: NZJSAB; ISSN: 0028-8365

DOCUMENT TYPE: Journal  
LANGUAGE: English

AB This detailed study of New Zealand dicotyledons was made to isolate and identify the triterpenes which occur in them. In all cases, these were isolated by chromatog. of ether-soluble fractions on alumina for neutral compounds or on silica gel for acids. Identification of the compds. was made by direct comparison with authentic samples or by conversion to derivs. Friedelin, epifriedelinol, and  $\beta$ -sitosterol were identified in the bark of *Alectryon excelsum*; lupenone, lupeol, and lupenyl acetate in the leaves and taraxerol, taraxeryl acetate, and taraxerone in the bark of *Dracophyllum recurvum*; lupeol in the bark of *Carpodetus serratus*; taraxerol and  $\beta$ -sitosterol in the wood of *Corokia buddleoides*; ursolic acid in the leaves of *Ixerba brexioides*; and  $\beta$ -sitosterol and a leucoanthocyanin in the bark of *Knightia excelsa*.

L27 ANSWER 12 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1997:450410 CAPLUS  
DOCUMENT NUMBER: 127:188193  
TITLE: Gracilipene: a heterocyclic seco-trisnor-oleanane from  
Calophyllum gracilipes (Guttiferae)  
AUTHOR(S): Cao, Shu-Geng; Sim, Keng-Yeow; Goh, Swee-Hock; Xue,  
Feng; Mak, Thomas C. W.  
CORPORATE SOURCE: Department Chemistry, National University Singapore,  
119260, Singapore  
SOURCE: Tetrahedron Letters (1997), 38(27), 4783-4786  
CODEN: TELEAY; ISSN: 0040-4039  
PUBLISHER: Elsevier  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI



AB Gracilipene (I), a novel heterocyclic trisnor-triterpene from the leaves of *Calophyllum gracilipes*, shows an unprecedented rearranged seco-trisnor-oleanane structure with a dihydropyran ring-A, as determined by NMR spectra and single crystal X-ray anal. Other known triterpenes isolated include friedelin, lupeol, lupenone,  $\beta$ -sitosterol, stigmasterol,  $3\beta$ -hydroxy-30-norlupan-20-one, lupane- $3\beta,20$ -diol, (20R)- $3\beta$ -hydroxylupan-29-oic acid, betulinic acid and squalene.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 13 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1995:453161 CAPLUS  
DOCUMENT NUMBER: 122:235234  
TITLE: Isolation of constituents from the leaves of *Syzygium tripinnatum*  
AUTHOR(S): Tsai, Ian-Lih; Sheen, Wine-Show; Chen, Jih-Jung; Chen, Ih-Sheng  
CORPORATE SOURCE: School of Pharmacy, Kaohsiung Medical College,  
Kaohsiung, Taiwan  
SOURCE: Chinese Pharmaceutical Journal (Taipei, Taiwan)  
(1994), 46(5), 401-12  
CODEN: CPHJEP; ISSN: 1016-1015  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Six triterpenoids (friedelin, lupenone, lupeol, lupenyl palmitate, obtusalin and cycloartenyl stearate) and 3 steroids (stigmast-4-en-3-one,  $\beta$ -sitosterol and  $\beta$ -sitosteryl stearate) were isolated from the CHCl<sub>3</sub> soluble fraction of the leaves of *S. tripinnatum*. The structures of these compds. were verified by chemical and spectroscopic methods.

L27 ANSWER 14 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1995:184598 CAPLUS  
DOCUMENT NUMBER: 122:76535  
TITLE: Foliar lipids. III. Triterpenic ketones.  
AUTHOR(S): Debal, A.; Mallet, J.-F.; Ucciani, E.; Doumenq, P.;  
Gamisans, J.  
CORPORATE SOURCE: Faculte des Sciences et Techniques, Marseille, 13397,  
Fr.  
SOURCE: Revue Francaise des Corps Gras (1994), 41(5-6), 113-18  
CODEN: RFCGAE; ISSN: 0035-3000  
DOCUMENT TYPE: Journal  
LANGUAGE: French  
AB Hexane exts. of plant leaves (HEPL) of 16 species have been investigated for their triterpenic ketone content. Five pentacyclic ketones have been identified by GC/IR-FT and GC-MS, i.e. arborinone, taraxerone, lupenone, friedelin and  $\beta$ -amyrrenone. A sixth one could not be identified. Two species represented interesting sources: *Ruscus aculeatus* (12.5% lupenone/HEPL) and *Senecio bicolor* (8.1 %  $\beta$ -amyrinone/HEPL).

L27 ANSWER 15 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1994:442514 CAPLUS  
DOCUMENT NUMBER: 121:42514  
TITLE: Chemical components of of Daguoymateng (Mucuna macrocarpa)  
AUTHOR(S): Hu, Wangyun; Luo, Shide; Cai, Jianxun  
CORPORATE SOURCE: Kunming Inst. Bot., Chin. Acad. Sci., Kunming, 650223,  
Peop. Rep. China  
SOURCE: Zhongcaoyao (1994), 25(2), 59-60,63  
CODEN: CTYAD8; ISSN: 0253-2670  
DOCUMENT TYPE: Journal  
LANGUAGE: Chinese  
AB Lupenone, friedelin,  $\Delta$ 5,22-stigmastadien-3 $\beta$ -ol, 2,3-dihydroxypropyl tetracosanoate, 2,3-dihydroxypropyl pentacosanoate, and 2,3-dihydroxypropyl hexacosanoate were isolated from Daguoymateng (Mucuna macrocarpa stem) and identified by chemical and spectrochem. methods. 2,3-Dihydroxypropyl pentacosanoate was a novel comod.

L27 ANSWER 16 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1994:240087 CAPLUS  
DOCUMENT NUMBER: 120:240087  
TITLE: Constituents of Clusia fluminensis  
AUTHOR(S): Nagem, Tanus J.; Mesquita, Antonio A. L.; Silva, Rosalice  
CORPORATE SOURCE: Dep. Chem., Univ. Minas Gerais, Belo Horizonte, 30161,  
Brazil  
SOURCE: Fitoterapia (1993), 64, 380  
CODEN: FTRPAE; ISSN: 0367-326X  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The leaves of Clusia fluminensis yielded tricosane, lupenone, friedelin,  $\alpha$ - and  $\beta$ - friedelinol, amyrin, octacosanol, and  $\beta$ -sitosterol.

L27 ANSWER 17 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1990:155281 CAPLUS  
DOCUMENT NUMBER: 112:155281  
TITLE: The constituents from petroleum ether fraction of the stem bark of *Premna fulva* Craib  
AUTHOR(S): Zeng, Quan; Liu, Chengji; Liu, Ligen  
CORPORATE SOURCE: Dep. Tradit. Chin. Med., China Pharm. Univ., Nanjing,  
Peop. Rep. China  
SOURCE: Zhongguo Yaoke Daxue Xuebao (1989), 20(2), 94-6

CODEN: ZHYXE9; ISSN: 1000-5048

DOCUMENT TYPE:

Journal

LANGUAGE:

Chinese

AB The following compds. were isolated in crystal form from the petroleum ether fraction from *P. fulva* stem bark: friedelin, friedelan-3 $\beta$ -ol,  $\beta$ -sitosterol, and lupen-3-one. The compds. were identified by chemical and spectroscopic anal. Lupene-3-one was isolated and identified from the *Premma* genus (Verbenaceae) for the first time.

L27 ANSWER 18 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1980:181424 CAPLUS

DOCUMENT NUMBER: 92:181424

TITLE: Photochemical or photomimetic fossil triterpenoids in sediments and petroleum

AUTHOR(S): Corbet, B.; Albrecht, P.; Ourisson, G.

CORPORATE SOURCE: Inst. Chim., Univ. Louis Pasteur, Strasbourg, 67 008, Fr.

SOURCE: Journal of the American Chemical Society (1980), 102(3), 1171-3

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Eighteen fossil triterpeneoids, including friedelin,  $\alpha$ - and  $\beta$ -amyrone, lupenone, luponone and related ring-opened derivs., were isolated from the sediments in the delta of the Mahakam river (Indonesia) and some photochem. mechanisms were postulated for their formation.

L27 ANSWER 19 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1978:117763 CAPLUS

DOCUMENT NUMBER: 88:117763

TITLE: An examination of the Euphorbiace of Hong Kong. Part 16. Triterpenoids from *Glochidion macrophyllum* and *G. puberum*

AUTHOR(S): Hui, Wai-Haan; Li, Man-Moon

CORPORATE SOURCE: Dep. Chem., Univ. Hong Kong, Hong Kong, Hong Kong

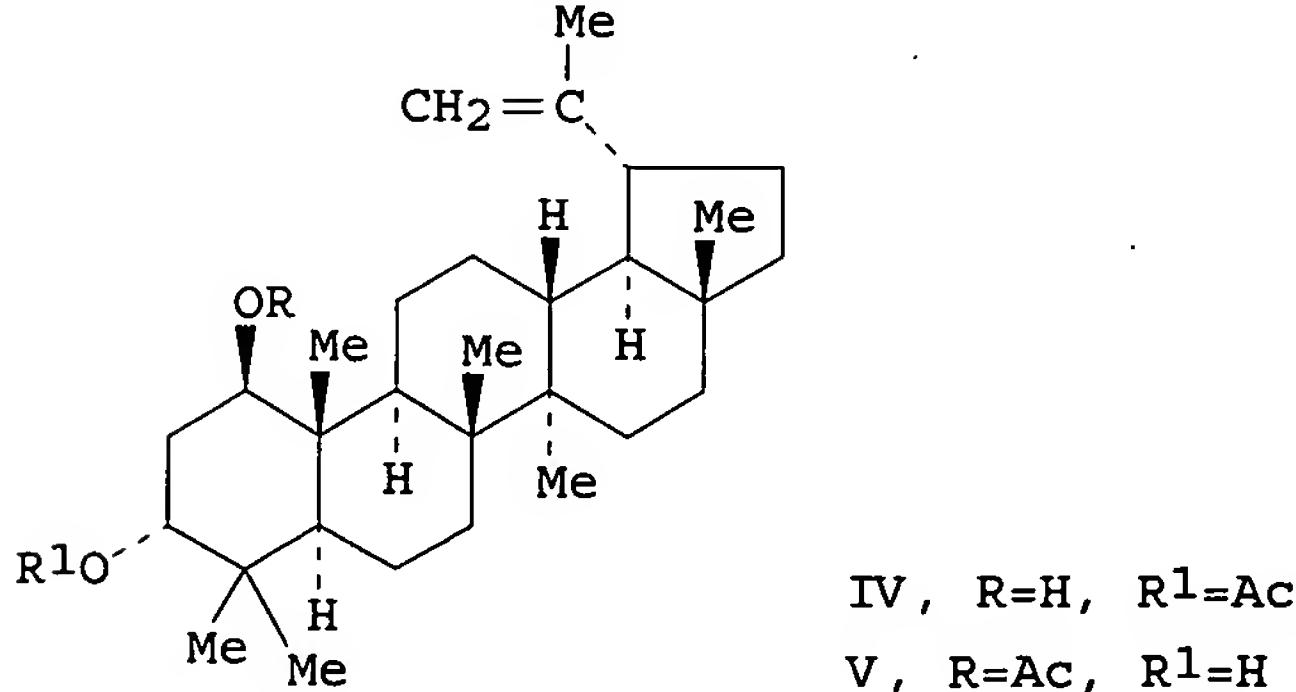
SOURCE: Phytochemistry (Elsevier) (1978), 17(1), 156-7

CODEN: PYTCAS; ISSN: 0031-9422

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB *G. macrophyllum* yielded Me betulinate and glochilocudiol. *G. puberum* leaves yielded friedelin (I), friedelan-3 $\beta$ -ol (II), lupeol, lup-20(29)-ene-1,3-dione, and sitosterol (III), and the stems I, II, III, lupenone, glochidone, lup-20(29)-en-1 $\beta$ -ol-3 $\alpha$ -yl acetate (IV), lup-20(29)-en-3 $\alpha$ -ol-1 $\beta$ -yl acetate (V), glochidonol,

glochidiol, and lup-20(29)-ene-1 $\beta$ ,3 $\beta$ -diol.

L27 ANSWER 20 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1977:117668 CAPLUS  
DOCUMENT NUMBER: 86:117668  
TITLE: Chemical constituents of the flowers and leaves of  
Notonia grandiflora  
AUTHOR(S): Kotaiah, Y.; Lakshmi, N. K. M.; Rao, E. Venkata; Rao,  
D. Venkata  
CORPORATE SOURCE: Dep. Pharm. Sci., Andhra Univ., Waltair, India  
SOURCE: Indian Journal of Pharmacy (1976), 38(5), 130-1  
CODEN: IJPAAO; ISSN: 0019-5472  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Two flavonoids were isolated from the flowers of *N. grandiflora* and  
identified as kaempferitrin and kaempferol 7-O-rhamnoside.  
Friedelin and lupenone were isolated from the leaves.

L27 ANSWER 21 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1975:544551 CAPLUS  
DOCUMENT NUMBER: 83:144551  
TITLE: Indian medicinal plants. XXXIV. Triterpenes from  
Grewia asiatica  
AUTHOR(S): Chattopadhyay, Subhagata; Pakrashi, S. C.  
CORPORATE SOURCE: Dep. Med. Chem., Indian Inst. Exp. Med., Calcutta,  
India  
SOURCE: Journal of the Indian Chemical Society (1975), 52(6),  
553  
CODEN: JICSAH; ISSN: 0019-4522  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The stem-bark of *G. asiatica* was successively extracted in a Soxhlet apparatus  
with  
petroleum ether, C<sub>6</sub>H<sub>6</sub>, and CH<sub>2</sub>Cl<sub>2</sub>. From the petroleum ether extract was  
isolated lupeol and betulin. From the petroleum ether and C<sub>6</sub>H<sub>6</sub> extract was  
isolated lupenone and friedelin. The compds. were  
identified by phys. and chemical properties.

L27 ANSWER 22 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1975:455701 CAPLUS  
DOCUMENT NUMBER: 83:55701  
TITLE: Triterpenoids from ten *Lithocarpus* species of Hong  
Kong  
AUTHOR(S): Hui, Wai-Haan; Ko, Phyllis D. S.; Lee, Yuk-Chun; Li,  
Man-Moon; Arthur, Henry R.  
CORPORATE SOURCE: Dep. Chem., Univ. Hong Kong, Hong Kong, Hong Kong  
SOURCE: Phytochemistry (Elsevier) (1975), 14(4), 1063-6  
CODEN: PYTCAS; ISSN: 0031-9422  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB From the petrol exts. of the leaves and stems of 10 *Lithocarpus* species  
(*L. attenuata*, *L. cornea*, *L. elizabethae*, *L. glabra*, *L. haipinii*, *L.  
hancei*, *L. harlandi*, *L. irwinii*, *L. litchioides*, and *L. polystachya*) of  
the Fagaceae family, were isolated 23 different triterpenoids, and  
sitosterol and stigmasterol. Of the triterpenoids, 11 belonged to the  
oleanane and rearranged oleanane group [ $\beta$ -amyrin, friedelin  
, friedelan-3 $\beta$ -ol, glutinol, taraxerone, taraxerol, and its acetate,  
canophyllol (28-hydroxyfriedelan-3-one), friedelan-2,3-dione  
(3-hydroxyfriedel-3-en-2-one), pachysandiol A (2 $\alpha$ ,3 $\beta$ -  
dihydroxyfriedelane) and a new compound lithocarpic lactone C<sub>30</sub>H<sub>50</sub>O<sub>2</sub>]. Four  
compds. were from the lupane and rearranged lupane group (lupenone  
, lupeol, betulin, and taraxasterol), 2 from the hopane group  
(22-hydroxyhopan-3-one and 3 $\beta$ ,22-dihydroxyhopane), and 6 were  
probably new compds.

L27 ANSWER 23 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1975:175161 CAPLUS  
DOCUMENT NUMBER: 82:175161  
TITLE: Chemical components of *Avicennia officinalis*  
AUTHOR(S): Subramanian, S. Sankara; Vedantham, T. N. C.  
CORPORATE SOURCE: Dep. Chem., Jawaharlal Inst. Postgrad. Med. Educ.  
Res., Pondicherry, India  
SOURCE: Indian Journal of Pharmacy (1974), 36(4), 105-6  
CODEN: IJPAAO; ISSN: 0019-5472  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The aerial parts of *A. officinalis* were extracted with  $\text{CHCl}_3$  followed by 80%  $\text{EtOH}$ . Chromatog. of the extract on neutral alumina and elution with light petroleum yielded lupenone [1617-70-5], m.  $165-6^\circ$ , identified by comparison with an authentic sample. Light petroleum-benzene (9:1) fractions gave friedelin [559-74-0], m.  $257-9^\circ$ . Further elution with 1:1 light petroleum-benzene yielded lupeol [545-47-1], m.  $208-10^\circ$  and  $\beta$ -sitosterol [83-46-5], m.  $132-3^\circ$ . Elution with 98:2  $\text{CHCl}_3$ -MeOH gave betulinic acid [472-15-1], m.  $> 280^\circ$ , identified as the Me ester m.  $220-1^\circ$ , acetate m.  $> 280^\circ$ , and Me ester acetate m.  $198-200^\circ$ ; and ursolic acid [77-52-1], m.  $> 280^\circ$ , identified by preparation of its Me ester and Me ester acetate.

L27 ANSWER 24 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1973:1995 CAPLUS  
DOCUMENT NUMBER: 78:1995  
TITLE: Constituents of pollen. 1. Constituents of *Quercus acutissima*. 1  
AUTHOR(S): Ohmoto, Taichi; Nikaido, Tamotsu; Ikuse, Masa  
CORPORATE SOURCE: Fac. Pharm., Toho Univ., Funabashi, Japan  
SOURCE: Shoyakugaku Zasshi (1972), 26(1), 36-40  
CODEN: SHZAAY; ISSN: 0037-4377  
DOCUMENT TYPE: Journal  
LANGUAGE: Japanese  
AB Pollen of *Q. acutissima* was crushed ultrasonically and its constituents were studied. Stearic, palmitic, and oleic acids; friedelin;  $\beta$ -amyrone; lupenone;  $\beta$ -sitosterol; campesterol; glycerin; and araban were identified. Eighteen amino acids and citric, malonic, and malic acids were determined

L27 ANSWER 25 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1972:458778 CAPLUS  
DOCUMENT NUMBER: 77:58778  
TITLE: Chemistry of Brazilian Guttiferae. XXVIII. Xanthones from *Caraipa densiflora*  
AUTHOR(S): Alves De Lima, R.; Gottlieb, O. R.; Mesquita, A. A.  
Lins  
CORPORATE SOURCE: Esc. Pos-Graduacao, Univ. Fed. Rural Rio de Janeiro, Rio de Janeiro, Brazil  
SOURCE: Phytochemistry (Elsevier) (1972), 11(7), 2307-9  
CODEN: PYTCAS; ISSN: 0031-9422  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB The trunk wood of *C. grandifolia* contains sitosterol, lupeol, lupenone, betulinic acid, and vanillin. The trunk wood of *C. densiflora* contains sitosterol, lupeol, friedelin, betulinic acid, vanillin, 1,6-dihydroxy-7,8-methylene-dioxyxanthone, and 1,5-dihydroxy-6,7-dimethoxyxanthone.

L27 ANSWER 26 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1969:481570 CAPLUS  
DOCUMENT NUMBER: 71:81570

TITLE: Examination of the Euphorbiaceae of Hong Kong. VI.  
Isolation and structure of glochidionol, a new  
triterpene ketol from *Glochidion wrightii*  
Hui, Wai Haan; Fung, M. L.  
CORPORATE SOURCE: Univ. Hong Kong, Hong Kong  
SOURCE: Journal of the Chemical Society [Section] C: Organic  
(1969), (13), 1710-12  
CODEN: JSOOAX; ISSN: 0022-4952  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
GI For diagram(s), see printed CA Issue.  
AB *Glochidionol*, isolated from the stems of *G. wrightii* was shown to be 1 $\beta$ -hydroxylup-20(29)-en-3-one (I) by chemical and N.M.R. spectroscopic evidence. The mass spectrum of glochidonyl acetate is discussed. Other compds. obtained from both the leaves and stems of the same plant are friedelin, glochidone, friedelan-3 $\beta$ -ol,  $\beta$ -sitosterol, and glochidiol. Lupenone and lupeol are also found in the stems.

L27 ANSWER 27 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1968:47008 CAPLUS  
DOCUMENT NUMBER: 68:47008  
TITLE: Triterpenes from some New Zealand dicotyledons  
AUTHOR(S): Briggs, Lindsay H.; Cambie, Richard C.; Couch, R. A. F.  
CORPORATE SOURCE: Univ. Auckland, Auckland, N. Z.  
SOURCE: New Zealand Journal of Science (1967), 10(4), 1076-82  
CODEN: NZJSAB; ISSN: 0028-8365  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB This detailed study of New Zealand dicotyledons was made to isolate and identify the triterpenes which occur in them. In all cases, these were isolated by chromatog. of ether-soluble fractions on alumina for neutral compounds or on silica gel for acids. Identification of the compds. was made by direct comparison with authentic samples or by conversion to derivs. Friedelin, epifriedelinol, and  $\beta$ -sitosterol were identified in the bark of *Alectryon excelsum*; lupenone, lupeol, and lupenyl acetate in the leaves and taraxerol, taraxeryl acetate, and taraxerone in the bark of *Dracophyllum recurvum*; lupeol in the bark of *Carpodetus serratus*; taraxerol and  $\beta$ -sitosterol in the wood of *Corokia buddleoides*; ursolic acid in the leaves of *Ixerba brexioides*; and  $\beta$ -sitosterol and a leucoanthocyanin in the bark of *Knightia excelsa*.

L27 ANSWER 1 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2004:262878 CAPLUS  
DOCUMENT NUMBER: 141:363075  
TITLE: Chemical constituents from Terminalia glabrescens  
AUTHOR(S): Garcez, Fernanda R.; Garcez, Walmir S.; Miguel, Daniel L. S.; Serea, Alessandro A. T.; Prado, Fabiana C.  
CORPORATE SOURCE: Departamento de Quimica, Centro de Ciencias Exatas e Tecnologia, Universidade Federal de Mato Grosso do Sul, Campo Grande, 79070-900, Brazil  
SOURCE: Journal of the Brazilian Chemical Society (2003), 14 (3), 461-465  
PUBLISHER: Sociedade Brasileira de Quimica  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB A new oleanane-type triterpene ( $3\beta, 6\beta, 23, 28$ -tetrahydroxyolean-12-ene) was isolated from the leaves of Terminalia glabrescens, together with ursolic,  $2\alpha$ -hydroxyursolic, oleanolic, maslinic, arjunolic, sumaresinolic and asiatic acids, squalene, phytol, sitosterol-3-O- $\beta$ -D-glucopyranoside and n-alkanes. Friedelin, taraxerol, lupeol, lupenone, betulin, betulone, betulinic acid, arjunglucoside I, stigmastane- $3\beta, 6\alpha$ -diol,  $\beta$ -sitosterol, (-) catechin,  $\beta$ -D-pyranotagatose,  $\beta$ -D-furanofructose and  $\alpha$ -D-furanofructose were obtained from the trunk bark.  
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 2 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2003:592477 CAPLUS  
DOCUMENT NUMBER: 139:304563  
TITLE: Flavonoid and triterpenes from Stigmaphyllon paralias  
AUTHOR(S): David, Jorge M.; Santos, Fatima A.; Guedes, Maria Lenise da S.; David, Juceni P.  
CORPORATE SOURCE: Instituto de Quimica, Universidade Federal da Bahia, Salvador-BA, 40170-290, Brazil  
SOURCE: Quimica Nova (2003), 26(4), 484-487  
PUBLISHER: Sociedade Brasileira de Quimica  
DOCUMENT TYPE: Journal  
LANGUAGE: Portuguese  
AB Stigmaphyllon paralias is a herb belonging to the family Malpighiaceae that occurs in sand soil of Brazilian "restinga". This is the first report regarding phytochem. study with this species. The hexane extract of the aerial parts of plant afforded the triterpenes friedelin, lupenone, 3-oxo- $\alpha$ -amyrin and 3-oxo- $\beta$ -amyrin, the mixture of  $\alpha$ -amyrinyl palmitate and stearate, lupeol and 3,4-seco-friedelan-3-oic acid. The AcOEt extract yielded the flavonoid luteolin-7-rutinoside. All compds. were characterized by anal. of spectrometric data and the fatty acids esterified with  $\alpha$ -amyrin were identified by GC/MS of Me derivs. of transesterified products. This is the first natural occurrence of 3,4-seco-friedelan-3-oic acid and the  $^{13}C$  NMR spectral data were unequivocally assigned by two-dimensional techniques. This work also permitted to correct the  $^{13}C$  NMR resonances attributed to Me groups C-26 and C-27 of friedelin.  
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 3 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2002:878092 CAPLUS  
DOCUMENT NUMBER: 139:81998  
TITLE: Study on constituents of latex: triterpenoids of Euphorbia tirucalli  
AUTHOR(S): Fujita, Maki; Oka, Hanae; Arai, Yoko; Masuda, Kazuo;

CORPORATE SOURCE: Takano, Akihito; Shiojima, Kenji  
Showa Pharmaceutical University, Machida, Tokyo,  
194-8543, Japan

SOURCE: Natural Medicines (Tokyo, Japan) (2002), 56(4), 160  
CODEN: NMEDEO; ISSN: 1340-3443

PUBLISHER: Japanese Society of Pharmacognosy

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The normal hexane extract of *Euphorbia tirucalli* was chromatographed on silica gel yielding several fractions. Paraffins from fraction 1 were mixts. of C<sub>23</sub>H<sub>48</sub> to C<sub>31</sub>H<sub>64</sub>, while fatty acid esters from fraction 2 were esters of compound euphol and tirucallol. Three acetates of euphol, tirucallol and lupeol and two ketones, lupenone and friedelin were detected in fraction 3. Triterpenoid alcs. I, II and glutinol were identified from the alc. fraction of fraction 4.

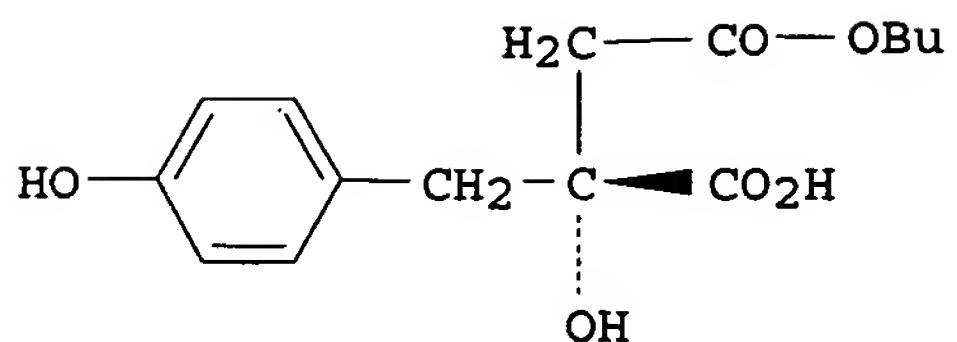
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 4 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2002:512184 CAPLUS  
DOCUMENT NUMBER: 137:291618  
TITLE: Furocoumarins, terpenes and sterols from *Esenbeckia ovata* Kunth  
AUTHOR(S): Rios, Maria Yolanda; Delgado, Guillermo  
CORPORATE SOURCE: Centro de Investigaciones Quimicas, Universidad Autonoma del Estado de Morelos, Cuernavaca, 62210, Mex.  
SOURCE: Biochemical Systematics and Ecology (2002), 30(7), 697-699  
CODEN: BSECBU; ISSN: 0305-1978  
PUBLISHER: Elsevier Science Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Dried leaves from *Esenbeckia ovata* Kunth (Rutaceae) were exhaustively extracted to provide 145 g of extract that was chromatographed over silica gel  
60 using mixts. of n-hexane-Et acetate as eluent. This procedure yielded friedelin, lupenone, caryophyllene  $\beta$ -oxide, lupenol,  $\beta$ -sitosterol, bergapten, isopimpinellin, xanthotoxin, phellopterin, and cryptomeridiol. The finding of bergapten, isopimpinellin, xanthotoxin and phellopterin in *E. ovata* characterizes this species as being chemical in accordance with other species of *Esenbeckia* genus and the Rutaceae family.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 5 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2002:344677 CAPLUS  
DOCUMENT NUMBER: 137:166182  
TITLE: Two new phenolic carboxylic acid esters from *Opuntia vulgaris*  
AUTHOR(S): Jiang, Jianqin; Ye, Wencai; Chen, Zhen; Lou, Fengchang; Min, Zhida  
CORPORATE SOURCE: Department of Phytochemistry, China Pharmaceutical University, Nanjing, 210038, Peop. Rep. China  
SOURCE: Journal of Chinese Pharmaceutical Sciences (2002), 11(1), 1-3  
CODEN: JCHSE4; ISSN: 1003-1057  
PUBLISHER: Beijing Medical University, School of Pharmaceutical Sciences  
DOCUMENT TYPE: Journal  
LANGUAGE: English



AB Two new phenolic carboxylic acid esters Bu eucomate (e.g. I) and Me eucomate and six known compds. eucomic acid, 3- $\beta$ -acetyl-taraxerol, friedelin, lupenone, Me linoleate and Me oleate were isolated from the stems of *Opuntia vulgaris* Mill (Cactaceae). Their structures were determined on the basis of spectral methods. All known compds. except friedelin were isolated for the first time from this plant.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 6 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:146761 CAPLUS

DOCUMENT NUMBER: 137:30534

TITLE: Sesquiterpene polyol esters and triterpenes from *Celastrus punctatus*

AUTHOR(S): Kuo, Yao-Haur; Li, Shyh-Yuan; Shen, Ya-Chin; Huang, Hui-Chi; Hsu, Ya-Wen; Tseng, Rong-Jeng; Ou, Jun-Chih; Chen, Chieh-Fu

CORPORATE SOURCE: National Research Institute of Chinese Medicine, Taipei, 112, Taiwan

SOURCE: Chinese Pharmaceutical Journal (Taipei, Taiwan) (2001), 53(5), 257-268

CODEN: CPHJEP; ISSN: 1016-1015

PUBLISHER: Pharmaceutical Society of Republic of China

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Five sesquiterpene polyol esters with  $\beta$ -dihydroagarofuran including 1 $\beta$ -acetoxy-8 $\beta$ , 9 $\alpha$ -dibenzoyloxy-6 $\alpha$ -hydroxy-2 $\beta$  ( $\alpha$ -methylbutanoyloxy)- $\beta$ -dihydroagarofuran (1), 1 $\beta$ -acetoxy-8 $\beta$ , 9 $\alpha$ -dibenzoyloxy-4 $\alpha$ , 6 $\alpha$ -dihydroxy-2 $\beta$  ( $\alpha$ -methylbutanoyloxy)- $\beta$ -dihydroagarofuran (2), 1 $\beta$ -acetoxy-2 $\beta$ , 8 $\beta$ , 9 $\alpha$ -tribenzoyloxy-6 $\alpha$ -hydroxy- $\beta$ -dihydroagarofuran (3), 1 $\beta$ -acetoxy-2 $\beta$ , 8 $\beta$ , 9 $\alpha$ -tribenzoyloxy-4, 6 $\alpha$ -dihydroxy- $\beta$ -dihydroagarofuran (4) and celahin-D (5), as well as five triterpenes including friedelin (6), lupeol (7), lupenone (8), betulin (9) and lup-20(29)-en-3 $\beta$ , 30-diol (10) were isolated from the EtOH extract of the stems of *Celastrus punctatus*. The structures of compds. 1 to 10 were established on the basis of spectral anal. Biol. evaluation revealed that these compds. were not highly cytotoxic against KB, Hepa-3B, Hela and COLO-205 cancer cells.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 7 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:39190 CAPLUS

DOCUMENT NUMBER: 136:366382

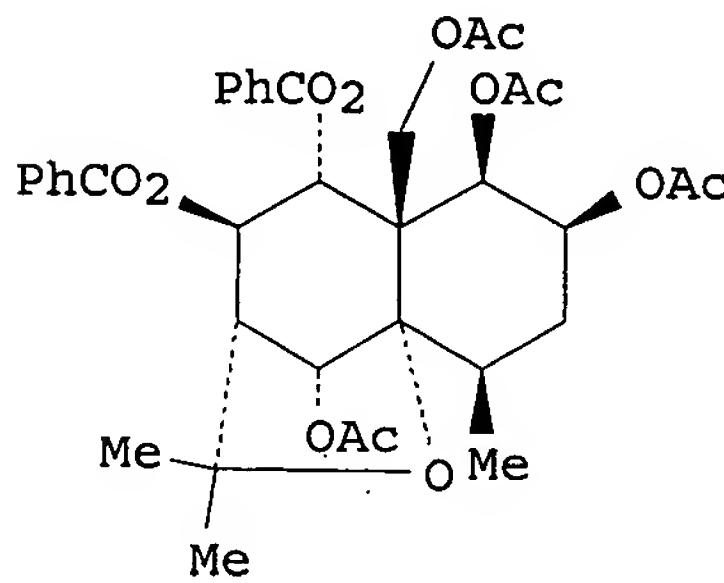
TITLE: Studies on chemical constituents of *Adenophora wawreana*

AUTHOR(S): Zhao, Kuijun; Liu, Suolan; Yang, Jun; Li, Xiuqing; Yan, Xiaolin; Zheng, Chenggui; Tu, Pengfei; Chen, Hubiao

CORPORATE SOURCE: Department of Pharmacy, Beijing Medical College of PLA, Beijing, 100071, Peop. Rep. China

SOURCE: Zhongcaoyao (2001), 32(11), 964-966  
 CODEN: CTYAD8; ISSN: 0253-2670  
 PUBLISHER: Zhongcaoyao Zazhi Bianjibu  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Chinese  
 AB The chemical constituents of roots of *Adenophora wawreana* Zahibr. were studied. The chemical constituents were extracted and isolated systematically with solvents and silica gel chromatog. Their structures were determined by IR,  $^1\text{H}$ NMR,  $^{13}\text{C}$ NMR, and MS. Twelve compds. were obtained, and nine of them were identified as  $\beta$ -sitosteryl hexadecanoate (I),  $\beta$ -sitosteryl octadecanoate (II),  $\alpha$ -amyrin acetate (III), lupeol acetate (IV), lupenone, friedelin,  $\beta$ -sitosterol (V), ikshusterol, and daucosterol. All of them were obtained for the first time from *A. wawreana*, and compds. I, II, III, IV, and V were obtained for the first time from *Adenophora* Fisch.

L27 ANSWER 8 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2000:477440 CAPLUS  
 DOCUMENT NUMBER: 133:220150  
 TITLE: A novel agarofuran sesquiterpene, celahin D from *Celastrus hindsii* Benth  
 AUTHOR(S): Huang, Hui-Chi; Shen, Chien-Chang; Chen, Chieh-Fu; Wu, Yang-Chang; Kuo, Yao-Haur  
 CORPORATE SOURCE: Graduate Institute of Natural Products, Kaohsiung Medical College, Kaohsiung, 807, Taiwan  
 SOURCE: Chemical & Pharmaceutical Bulletin (2000), 48(7), 1079-1080  
 PUBLISHER: Pharmaceutical Society of Japan  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



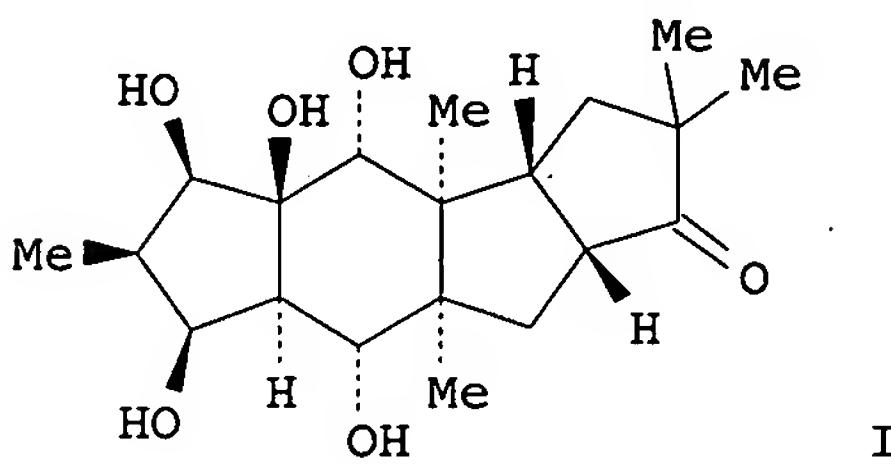
AB A novel agarofuran sesquiterpene polyol ester,  $1\beta,2\beta,6\alpha,15\beta$ -tetraacetoxy- $8\beta,9\alpha$ -dibenzoyloxy- $\beta$ -dihydroagarofuran (celahin D, I), two known analogs of  $1,1\beta$ -acetoxy- $8\beta,9\alpha$ -dibenzoyloxy- $4\alpha,6\alpha$ -dihydroxy- $2\beta$ -( $\alpha$ -methylbutanoyloxy)- $\beta$ -dihydroagarofuran and  $1\beta$ -acetoxy- $8\beta,9\alpha$ -dibenzoyloxy- $6\alpha$ -hydroxy- $2\beta$ -( $\alpha$ -methylbutanoyloxy)- $\beta$ -dihydroagarofuran, and a known cytotoxic sesquiterpene pyridine alkaloid, emarginatine E, were isolated from the stems of *Celastrus hindsii* Benth. Three known triterpenes, loranthol, lupenone and friedelinol were also obtained from the titled plant. Structural elucidation of I was established by 2D NMR spectra.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 9 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2000:52247 CAPLUS

DOCUMENT NUMBER: 132:248540  
 TITLE: Pentacyclic triterpenes from Chuquiraga ulicina  
 AUTHOR(S): Flagg, Melissa L.; Valcic, Susanne; Montenegro,  
 Gloria; Gomez, Miguel; Timmermann, Barbara N.  
 CORPORATE SOURCE: Department of Pharmaceutical Sciences, College of  
 Pharmacy, The University of Arizona, Tucson, AZ,  
 85721, USA  
 SOURCE: Phytochemistry (1999), 52(7), 1345-1350  
 CODEN: PYTCAS; ISSN: 0031-9422  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Taraxastane triterpenes,  $3\beta$ -acetoxy- $6\beta$ -hydroxytaraxasta-20-ene,  
 $6\beta$ -hydroxytaraxasta-20-en-3-one,  $6\beta$ -hydroxytaraxasta-20-ene  
 $3\beta$ -palmitate and  $3\beta,6\beta$ -dihydroxytaraxasta-20-ene, were  
isolated from the  $\text{CH}_2\text{Cl}_2$ -MeOH extract of Chuquiraga ulicina ssp. ulicina in  
addition to the known triterpenes lupeol, lupenyl acetate, lupenone  
, friedelinol,  $3\beta$ -acetoxy-30-nor-lupan-20-one, and  
30-nor-lupan- $3\beta$ -ol-20-one.  
 REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 10 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1998:622986 CAPLUS  
 DOCUMENT NUMBER: 129:313363  
 TITLE: A tetracyclic diterpene and triterpenes from Euphorbia  
 segetalis  
 AUTHOR(S): Ferreira, Maria-Jose U.; Madureira, Ana Margarida;  
 Ascenso, Jose R.  
 CORPORATE SOURCE: Faculdade de Farmacia, Centro de Estudos e de Ciencias  
 Farmaceuticas, Universidade de Lisboa, Lisbon, 1699,  
 Port.  
 SOURCE: Phytochemistry (1998), 49(1), 179-183  
 CODEN: PYTCAS; ISSN: 0031-9422  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



AB A new tetracyclic diterpene, segetalol (I), with a novel carbon skeleton,  
has been isolated from the acetone extract of the whole plant of Euphorbia  
segetalis. Seven known compds. were also isolated: the pentacyclic  
triterpenes friedeline, lupenone, and glutinol, the  
tetracyclic triterpenes dammaradienol, cycloartenol and  
24-methylenecycloartanol and  $\beta$ -sitosterol. The structure of the new  
compound and its derivs. have been extensively characterized by high-field  
NMR spectroscopic methods including 2D NMR techniques.  
 REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 11 OF 27 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 1998:211856 CAPLUS

DOCUMENT NUMBER: 128:274929  
TITLE: Cytotoxic constituents from the fruit of *Diospyros ferrea*  
AUTHOR(S): Kuo, Yao-Haur; Li, Shyh-Yuan; Shen, Chien-Chang; Yang, Li-Ming; Huang, Hui-Chi; Liao, Wen-Bin; Chang, Chi-I.; Kuo, Yueh-Hsiung; Chen, Chieh-Fu  
CORPORATE SOURCE: Natl. Res. Inst. Chinese Med., Taipei, 11221, Taiwan  
SOURCE: Chinese Pharmaceutical Journal (Taipei) (1997), 49(4), 207-216  
PUBLISHER: Pharmaceutical Society of Republic of China  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Two naphthoquinones, isodospyrin (I), and 8'-hydroxyisodospyrin (II), 6 triterpenes, friedelin, epifriedelinol, lupeol, lupenone, betulin and lup-20(29)-en-3 $\beta$ ,30-diol, and 2 sterols,  $\beta$ -sitosterol and stigmasterol, were isolated from the n-hexane extract of the fruit of *D. ferrea*. All of these compds. were evaluated for in vitro cytotoxicity in 4 cancer cell lines. I and II had strong cytotoxicity against Hep-3B, KB, COLO-205 and HeLa cells (ED50 = 0.17, 1.72, 0.16 and 0.21  $\mu$ g/mL for I; ED50 = 1.31, 1.75, 1.96 and 1.79  $\mu$ g/mL for II).  
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 1 OF 1 MEDLINE on STN  
ACCESSION NUMBER: 2006574794 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 16886233  
TITLE: Anti-fatigue activity of a triterpenoid-rich extract from  
Chinese bamboo shavings (Caulis bamfusae in taeniam).  
AUTHOR: Zhang Yu; Yao Xiaobao; Bao Bili; Zhang Ying  
CORPORATE SOURCE: Department of Food Science and Nutrition, College of  
Biosystems Engineering and Food Science, Zhejiang  
University, Hangzhou 310029, Zhejiang Province, PR China..  
y\_zhang@zju.edu.cn  
SOURCE: Phytotherapy research : PTR, (2006 Oct) Vol. 20, No. 10,  
pp. 872-6.  
Journal code: 8904486. ISSN: 0951-418X.  
PUB. COUNTRY: England: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
(RESEARCH SUPPORT, NON-U.S. GOV'T)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200701  
ENTRY DATE: Entered STN: 28 Sep 2006  
Last Updated on STN: 4 Jan 2007  
Entered Medline: 3 Jan 2007  
AB The anti-fatigue activity of a pentacyclic triterpenoid extract  
from bamboo shavings (EBS) from the bark of bamboo  
(*Bambusa tuldaoides* Munro), was evaluated in BALB/c mice. EBS, isolated by  
the supercritical CO<sub>2</sub> fluid extraction (SFE) technique, was  
given to mice at concentrations of 0.04 (low-dose group), 0.08  
(middle-dose group) and 0.25 g/kg body weight (high-dose group). The  
anti-fatigue activity of EBS was estimated by the change in body weight,  
weight-loaded swimming test and climbing test, and corresponding  
parameters including serum urea nitrogen, hepatic glycogen and blood  
lactic acid were measured. The results showed that an appropriate level  
of EBS could prolong the weight-loaded swimming and climbing time, and had  
an active effect on the serum urea nitrogen, hepatic glycogen and blood  
lactic acid level in BALB/c mice, which significantly embodied the  
anti-fatigue activity of EBS. Overall, it is predicted that EBS, being a  
composition mainly containing a group of pentacyclic triterpenoids  
, and its main triterpenoid components have great potential for  
application in relevant fields for its anti-fatigue activity.  
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L36 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2006:662821 CAPLUS  
DOCUMENT NUMBER: 145:217439  
TITLE: Analysis of triterpenoids in fruiting bodies  
of Ganoderma lucidum with off-line  
supercritical fluid extraction - high  
performance liquid chromatography system  
AUTHOR(S): Zhang, Jie; Duan, Jicheng; Liang, Zhen; Zhang, Weibing; Zhang, Libua; Huo, Yushu; Zhang, Yukui  
CORPORATE SOURCE: Natl. Chromatographic Res. & Anal. Cent., Dalian Inst. Chem. Phys., Chinese Acad. Sci., Dalian, 116023, Peop. Rep. China  
SOURCE: Fenxi Huaxue (2006); 34(4), 447-450  
CODEN: FHHHDT; ISSN: 0253-3820  
PUBLISHER: Kexue Chubanshe  
DOCUMENT TYPE: Journal  
LANGUAGE: Chinese

AB An extraction method of triterpenoids in the fruiting bodies of ganoderma lucidum using supercrit. fluid (SF) was developed. The effects of pressure, temperature and time were investigated with respect to extraction yield.

The optimized parameters were as follows: extraction pressure 15 MPa, extraction

temperature 35°C, extraction time 120 min, flow rate of CO<sub>2</sub> 1 mL/min, and the temperature of back pressure regulator 50°C. In addition, a gradient elution method of high performance liquid chromatog. was developed for the anal. of extracted triterpenoids. By comparison, it found that the chromatograms of the triterpenoids extracted by supercrit. fluid and methanol were quite similar to each other, which demonstrated that supercrit. fluid could be used as a new generation of green extraction solvent instead of methanol.

L36 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1997:654097 CAPLUS  
DOCUMENT NUMBER: 127:316453  
TITLE: Supercritical fluid extraction of oil and triterpenoids from neem seeds  
AUTHOR(S): Johnson, Shaun; Morgan, E. David  
CORPORATE SOURCE: Department of Chemistry, Keele University, Keele, ST5 5BG, UK  
SOURCE: Phytochemical Analysis (1997), 8(5), 228-232  
CODEN: PHANEL; ISSN: 0958-0344  
PUBLISHER: Wiley  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The selective extraction of nimbin, salannin, azadirachtin and oil from Neem seeds, using supercrit. carbon dioxide and supercrit. carbon dioxide:methanol, has been investigated using various conditions. Extraction for 30 min with 100% carbon dioxide using a capillary restrictor to maintain the critical pressure removed only small amts. of oil and triterpenoids. Slightly higher levels of oil and triterpenoids were removed when a back-pressure regulator was used. Over a 150 min period, in 30 min intervals, 100% carbon dioxide extracted all the nimbin and salannin from the seeds, while leaving some azadirachtin behind. Using carbon dioxide:methanol, no conditions were found which would allow the selective extraction of azadirachtin. However, the highest pressures (34.4 MPa) and percentages of methanol (20%) removed the most azadirachtin. An optimum was observed for extracting nimbin and salannin at 20.6 MPa and 6% methanol.

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 1997:211742 CAPLUS

DOCUMENT NUMBER: 126:289354  
TITLE: Comparison of chromatographic systems for triterpenoids from Neem (*Azadirachta indica*) seeds  
AUTHOR(S): Johnson, Shaun; Morgan, E. David  
CORPORATE SOURCE: Dep. Chem., Univ. Keele, Keele, Staffordshire, ST5 5BG, UK  
SOURCE: Journal of Chromatography, A (1997), 761(1 + 2), 53-63  
PUBLISHER: Elsevier  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB Chromatog. conditions for the isolation and separation of 12 triterpenoids from Neem seeds, including azadirachtin and 6 closely related compds., are described. The elution orders of the compds. using supercrit. fluid chromatog. and reversed-phase HPLC are described. New and corrected NMR spectroscopic data for 11 of these compds. are tabulated.  
REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 4 OF 5 MEDLINE on STN  
ACCESSION NUMBER: 2006574794 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 16886233  
TITLE: Anti-fatigue activity of a triterpenoid-rich extract from Chinese bamboo shavings (*Caulis bamfusae in taeniam*).  
AUTHOR: Zhang Yu; Yao Xiaobao; Bao Bili; Zhang Ying  
CORPORATE SOURCE: Department of Food Science and Nutrition, College of Biosystems Engineering and Food Science, Zhejiang University, Hangzhou 310029, Zhejiang Province, PR China.. y\_zhang@zju.edu.cn  
SOURCE: Phytotherapy research : PTR, (2006 Oct) Vol. 20, No. 10, pp. 872-6.  
PUB. COUNTRY: England: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
(RESEARCH SUPPORT, NON-U.S. GOV'T)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200701  
ENTRY DATE: Entered STN: 28 Sep 2006  
Last Updated on STN: 4 Jan 2007  
Entered Medline: 3 Jan 2007

AB The anti-fatigue activity of a pentacyclic triterpenoid extract from bamboo shavings (EBS) from the bark of bamboo (*Bambusa tuldaoides* Munro), was evaluated in BALB/c mice. EBS, isolated by the supercritical CO<sub>2</sub> fluid extraction (SFE) technique, was given to mice at concentrations of 0.04 (low-dose group), 0.08 (middle-dose group) and 0.25 g/kg body weight (high-dose group). The anti-fatigue activity of EBS was estimated by the change in body weight, weight-loaded swimming test and climbing test, and corresponding parameters including serum urea nitrogen, hepatic glycogen and blood lactic acid were measured. The results showed that an appropriate level of EBS could prolong the weight-loaded swimming and climbing time, and had an active effect on the serum urea nitrogen, hepatic glycogen and blood lactic acid level in BALB/c mice, which significantly embodied the anti-fatigue activity of EBS. Overall, it is predicted that EBS, being a composition mainly containing a group of pentacyclic triterpenoids, and its main triterpenoid components have great potential for application in relevant fields for its anti-fatigue activity.

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L36 ANSWER 5 OF 5 MEDLINE on STN  
ACCESSION NUMBER: 2003256954 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 12781802  
TITLE: Preparative purification of the major anti-inflammatory

AUTHOR: triterpenoid esters from Marigold (*Calendula officinalis*).  
Hamburger M; Adler S; Baumann D; Forg A; Weinreich B  
CORPORATE SOURCE: Institute of Pharmacy, Friedrich-Schiller-University Jena,  
Semmelweisstrasse 10, Jena D-07743, Germany..  
b7hama@rz.uni-jena.de  
SOURCE: Fitoterapia, (2003 Jun) Vol. 74, No. 4, pp. 328-38.  
Journal code: 16930290R. ISSN: 0367-326X.  
PUB. COUNTRY: Netherlands  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 200309  
ENTRY DATE: Entered STN: 4 Jun 2003  
Last Updated on STN: 9 Sep 2003  
Entered Medline: 8 Sep 2003  
AB A method for the efficient preparative purification of faradiol 3-O-laurate, palmitate and myristate, the major anti-inflammatory triterpenoid esters in the flower heads of the medicinal plant *Calendula officinalis* has been developed. Gram quantities of the individual compounds were obtained with 96 to 98% purity by a combination of supercritical fluid extraction (SFE), normal-phase and reversed-phase column chromatography. During the work-up of the faradiol esters, accompanying minor compounds of the triterpene ester fraction were purified and identified by spectroscopic means as maniladiol 3-O-laurate and myristate.